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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,911	10/30/2006	Yasushi Yoshida	713-1362	5868
33712 7590 10/28/2009 LOWE, HAUPTMAN, HAM & BERNER, LLP (ITW) 1700 DIAGONAL ROAD SUITE 300 ALEXANDRIA, VA 22314				
EXAMINER				
HILTON, ALBERT				
ART UNIT		PAPER NUMBER		
4171				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/567,911

Applicant(s)

YOSHIDA ET AL.

Examiner

Albert Hilton

Art Unit

4171

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-2, 7-8 is/are rejected.
7) ☒ Claim(s) 1-12 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 2/10/2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 2/10/2006
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. This is a first action on the merits. Claims 1-12 are pending.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10567911, filed on 10/30/2006.

Drawings

3. The drawings are objected to because the examiner believes that the reference number 116c in Fig. 2 should be replaced with reference number 116b. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 1-12 are objected to because of the following informalities: the word "objective" in line 5 of claim 1 and line 5 of claim 7 was presumably intended to be "object." Claims 2-6 and 8-12 are objected to as being dependent on claims 1 and 7, respectively. For examination purposes, the word "objective" has been read as "object" for both of the claims. Additionally, the phrase "from transferred" in line 8 of claim 7 is presumably intended to read "from being transferred," and for examination purposes has been read as such. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by ALLEN (US Patent No. 5725150).

7. Regarding claim 1, ALLEN discloses a voltage block device (**fluid supply system 10**) in which a negative potential is applied to a coating material supplied from a source (**manifold MA1, fluid supply Fn1**) to a spray (**dispenser 12**) (ALLEN: column 3, lines 62-67 to column 4, lines 1-9 and Fig. 1) comprising a switching device (**voltage blocking valve VBVA**) in which a slider is selectively slideable between a first and a

second position has an inlet port (**P2**) fluidly communicated with the coating material source (**MA1, Fn1**), and has an outlet port (**P4**) fluidly communicated with the spray (**12**) (ALLEN: column 5, lines 5-56 and Fig. 2). ALLEN further discloses a reservoir (**double piston cylinder DPA**) comprising first (**C2**) and second (**C1**) chambers, with the inlet (**P2**) and outlet (**P4**) ports being fluidly communicated with the first (**C2**) and second (**C1**) chambers, respectively, when the slider is at the first position (ALLEN: Fig. 1) and the inlet (**P2**) and outlet (**P4**) ports being fluidly communicated with the second (**C1**) and first chambers (**C2**), respectively, when the slider is at the second position (ALLEN: column 5, lines 5-56).

8. Regarding claim 2, the voltage block device of ALLEN comprises a cylinder and a double-headed piston (**double piston cylinder DPA**) slideable within the cylinder so that the inner wall of the cylinder and the ends of the double-headed piston (**DPA**) define a first (**C2**) and a second (**C1**) chamber in the cylinder (ALLEN: column 4, lines .40-55 and Fig. 1).

9. Regarding claim 7, ALLEN discloses an electrostatic coating system (**fluid supply system 10**) comprising a coating material source (**manifold MA1, fluid supply Fn1**); a spray (**dispenser 12**) with an applied negative potential (ALLEN: column 3, lines 62-67 to column 4, lines 1-9 and Fig. 1); a voltage block device for preventing the negative potential from being transferred to the coating material source (**MA1, Fn1**) comprising a switching device **voltage blocking valve VBVA**) in which a slider is selectively slideable between a first and a second position has an inlet port (**P2**) fluidly communicated with the coating material source (**MA1, Fn1**), and has an outlet port (**P4**)

fluidly communicated with the spray **(12)** (ALLEN: column 5, lines 5-56 and Fig. 2).

ALLEN further discloses a reservoir (**double piston cylinder DPA**) comprising first **(C2)** and second **(C1)** chambers, with the inlet **(P2)** and outlet **(P4)** ports being fluidly communicated with the first **(C2)** and second **(C1)** chambers, respectively, when the slider is at the first position (ALLEN: Fig. 1) and the inlet **(P2)** and outlet **(P4)** ports being fluidly communicated with the second **(C1)** and first chambers **(C2)**, respectively, when the slider is at the second position (ALLEN: column 5, lines 5-56).

10. Regarding claim 8, the electrostatic coating system (**fluid supply system 10**) of ALLEN comprises a cylinder and a double-headed piston (**double piston cylinder DPA**) slideable within the cylinder so that the inner wall of the cylinder and the ends of the double-headed piston (**DPA**) define a first **(C2)** and a second **(C1)** chamber in the cylinder (ALLEN: column 4, lines .40-55 and Fig. 1).

Allowable Subject Matter

11. Claims 3-6 and 9-12 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Regarding claims 3, the prior art contains voltage block devices that make use of four-way switching devices such as the device disclosed in ALLEN, in which the inlet and outlet ports are in communication with the first and second chambers of a double-headed piston, respectively, when the switch is in a first position, and the inlet and outlet ports are in communication with the second and first chambers, respectively, when the switch is in a second position. However, the examiner is unaware of a voltage block

device in the prior art that makes use of quick couplers that couple and decouple from fluid inlet or outlet passages, or any obvious reason to add such a switch to the invention of ALLEN. SCHARFENBERGER (US Patent No. 7296756) also discloses a similar voltage block with a selectively slideable switch and a double-piston cylinder, but was filed after the filing of the instant application on May 23, 2005, and is not available as prior art.

13. Claims 4-6 are further limitations of claim 3, and therefore would be allowable if claim 3 were written in independent form.

14. Regarding claim 9, as mentioned in paragraph 12 above, the examiner is unaware of prior art that makes use of quick couplers that couple and decouple from fluid inlet or outlet passages, or any obvious reason to add such a switch to the invention of ALLEN.

15. Claims 10-12 are further limitations of claim 9, and therefore would be allowable if claim 9 were written in independent form.

16.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. SCHARFENBERGER (US Patent No. 7296756) also discloses a similar voltage block with a selectively slideable switch and a double-piston cylinder, but was filed after the filing of the instant application on May 23, 2005.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert Hilton whose telephone number is (571)-270-

5519. The examiner can normally be reached on Monday through Friday, with alternate Fridays off, 8:00-4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Barbara Gilliam can be reached on 571-272-1330. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Albert Hilton
Examiner
Art Unit 4171

/Albert Hilton/
Examiner, Art Unit 4171

/Diana L. Dudash/
Primary Examiner